

39. OCCURRENCE OF RARE JUMPING SPIDER *HARMOCHIRUS BRACHIATUS* (THORELL) (FAMILY: SALTICIDAE) IN THE BANANA AGRO-ECOSYSTEM OF VADODARA, GUJARAT

While studying the spider diversity of the banana agro-ecosystem of Vadodara, we came across a rare jumping spider *Harmochirus brachiatus* (Thorell). It was first reported by Tikader (1976) from Pune, Maharashtra, India. There is no report of its occurrence thereafter. It is an addition to the spider fauna of Gujarat.

Adult male is *c.* 2.00 mm in total length, Carapace 1.1 mm long and 0.8 mm wide. Abdomen 0.8 mm long and 0.7 mm wide. The tibia and femur of the first pair of legs swollen and first leg always kept up in a defensive position. Because of the unique structure of the first pair of legs and their peculiar way of movement, this spider can be easily distinguished from other salticids. A closer view of the 1st pair of legs,

shows a row of fringed hairs on the ventral and dorsal sides of the tibia, 3 and 2 pairs of ventral spines present on tibia and metatarsi respectively.

They move in the banana fields, on the pseudostem of the banana plant, and among the dry and decaying leaves of banana. Uncommonly seen in the pre-monsoon season (January-May).

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REFERENCE

TIKADER, B.K. (1976): Redescription of a jumping spider *Harmochirus brachiatus* (Thorell) with a new record from India. *J. Bombay nat. Hist. Soc.* 73(2): 410-411.

40. DESCRIPTION OF FEMALE *AMYCIAEA FORTICEPS* (CAMBRIDGE), ARANEAE: THOMISIDAE, WITH A REDESCRIPTION OF ITS MALE FROM KERALA, INDIA

(With one text-figure)

*Amyciaea forticeps* (Cambridge) is an antimimicking species of crab spider reported from India, Holland, Africa, Burma (=Myanmar) and Malaysia. Its resemblance to *Oecophylla smaragdina* (Fabr.) was studied by Mathew (1954). Tikader (1963) gave a description of this species in FAUNA OF INDIA based on a single male specimen collected from Pune. However, taxonomic literature regarding *A. forticeps* remains largely incomplete due to the absence of the description of a female. During our study of spiders of Ernakulam district, Kerala we came across several specimens of *A. forticeps*. On the

basis of these specimens, a description and illustration of *A. forticeps* is given below.

Collection and preservation of the spider samples were done following Tikader. The material was studied using a Stereozoom binocular microscope; model Leica MS 5. All measurements are in millimetres, made with an eyepiece graticule.

*Amyciaea forticeps* (Cambridge)

(Fig. 1a-h)

1873 *Amycle forticeps* Cambridge, *Proc. Zool. Soc., Lond.* 1873: 122

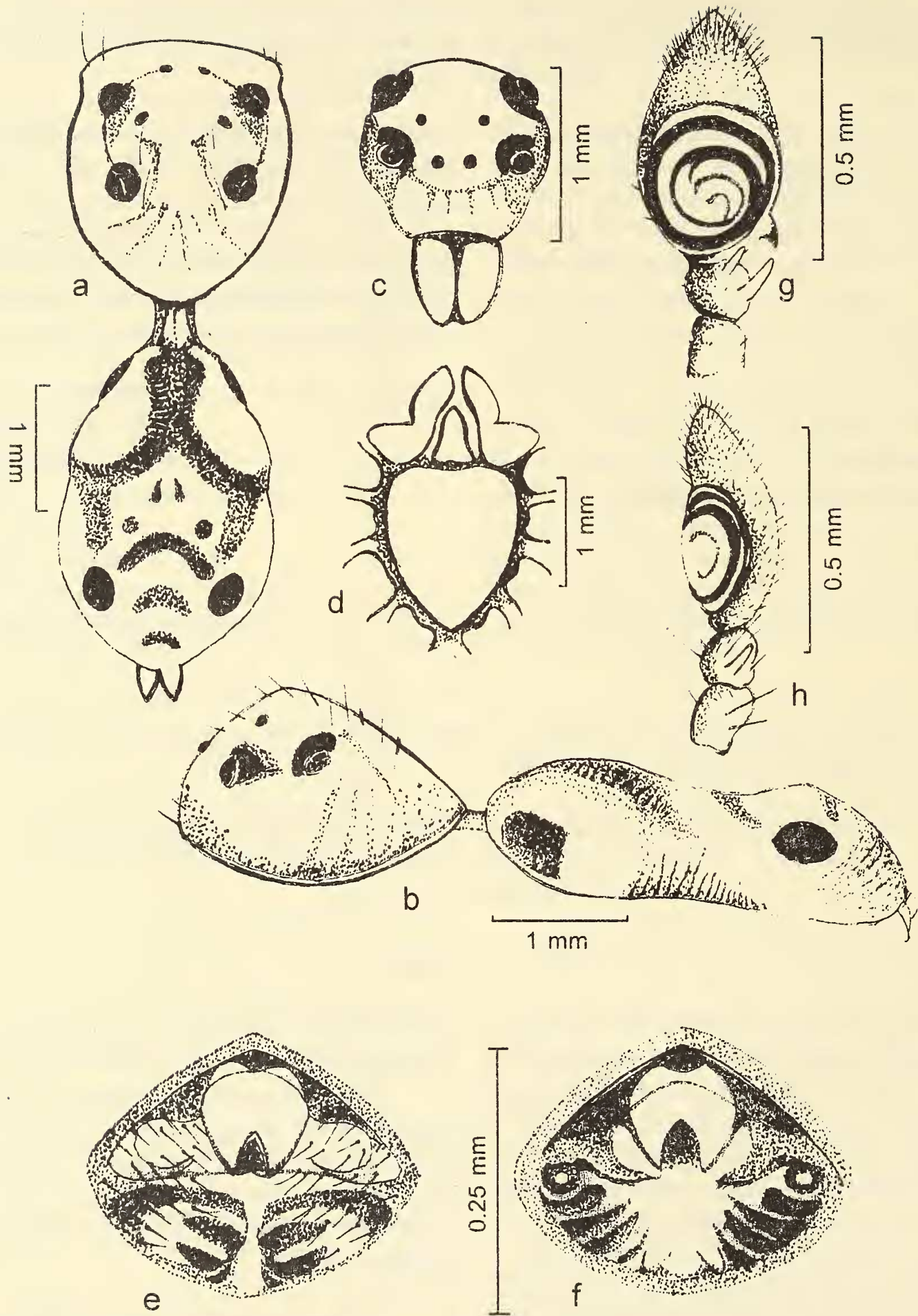


Fig. 1: *Amyciaea forticeps* (Cambridge); a. Dorsal view of the female, b. Lateral view of the female; c. Front view of the face, d. Sternum with Labium and Maxillae, e. Epigyne, f. Internal genitalia, g. Palp - Ventral view, h. Palp - lateral view.

1885 *Amyciaea forticeps*: Simon, *Bull. Soc. Zool. Fr.* 10: 447.

1963 *Amyciaea forticeps*: Tikader, *J. Univ. Poona Sci. & Tech.* 24: 52.

1980 *Amyciaea forticeps*: Tikader, *Fauna of India: Spiders (Araneae: Thomisidae)* 1(1): 169.

**Female:** Measurements (in mm): Total length 5.5 L, Carapace 2.2 L & 1.3 W; Abdomen 3.2 L & 1.5 W. Legs I: 8.24, II: 7.92, III: 4.33, IV: 6.87.

Cephalothorax longer than wide, cephalic region strongly elevated and sloping in front, anterior margin of cephalothorax straight. Thoracic area sloping gradually, wider behind PLE, lateral sides steeply sloped. Cephalothorax reddish brown or pale orange, with a few body hairs. Fovea shallow and inconspicuous. Eyes recurved, in three rows, PLE and ALE encircled by inner white ring and outer black patch. Median eyes smaller than laterals, PME smallest, PME at the middle of two eye rows, ocular quadrangle wider behind. Eyes black, eye diameter ALE = PLE = 0.5 mm, AME = 0.25 mm, PLE = 0.1 mm. Clypeus high, twice the height of AME. Sternum heart shaped, 1.3 times longer than wide, anterior margin straight, clothed with minute hairs, pointed posteriorly, reddish brown or light orange in colour. Labium reddish brown, longer than wide, maxillae similar in colour to labium, scopulae present on the inner margin. Chelicera moderately strong, similar to clypeus in colour and height, with a few hairs on the outer margins, seven small teeth on outer margin and two large teeth on inner margin. Palp as in Fig. 1g-h. Legs long and slender, tarsus with two claws provided with

minute hairs. Leg formula 1243. Legs resemble ant legs.

Abdomen longer than wide, anterior portion narrower, middle portion widest, two black eye-like spots on the dorsum on the posterolateral sides. A conspicuous inverted 'Y' shaped dark brown marking on the anterior half. Ventral side pale reddish-brown. A black spot at the anterior lateral end of the abdomen. Pedicel long. Abdomen clothed with fine hairs.

**Male:** Measurements (in mm): Total length 5L, carapace 2L & 1.1W, Abdomen 3L & 1.5W.

Cephalothorax longer than wide, reddish brown, narrowed anteriorly, broadest behind PLE. Cephalic region strongly raised and anterior margin slightly sloped. Thoracic area sloping gradually, posterior margin smoothly curved. Fovea long, shallow and inconspicuous. Clypeus moderately high, a little less than the separation of ALE. Ocular area as in female. Sternum reddish brown, longer than wide with truncate anterior end and pointed posterior end. Labium longer than wide, reddish brown. Maxillae similar to labium in colour. Chelicera moderately strong. Legs long, slender and ant-like, reddish brown in colour, tarsus and distal end of the metatarsus lighter. All segments uniformly clothed with minute hairs, few large bristles on femur, tarsus with two claws. Leg formula 1243. Pedipalp as long as tibia of leg I, MBA one, cymbium long straight and conical.

Abdomen longer than wide, reddish brown but lighter than carapace. Anterior end narrower, broadest behind the middle. Dorsum marked with an inverted 'Y' shaped dark brown marking and three to four transverse dark brown stripes

**Table 1:** Measurements of leg segments (in mm) of ♀ *Amyciaea forticeps* (Cambridge)

Leg	Coxa	Trochanter	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	0.43	0.18	1.98	0.43	2.16	1.98	1.08	8.24
II	0.36	0.29	1.62	0.54	2.09	1.87	1.15	7.92
III	0.29	0.11	1.08	0.29	1.08	1.01	0.47	4.33
IV	0.36	0.18	1.98	0.32	1.69	1.62	0.72	6.87

posteriorly. A black eye-like irregular spot on the anterolateral end near the pedicel. Spinnerets subequal in length. Dorsum has two hump-like prominences on the anterior and posterior end, with the middle being depressed, resembling an ant's abdomen. Ventral side pale reddish brown.

**Materials examined:** 2 ♀ ♀, location: Ernakulam 3.xii.2000, Coll: Samson Davis; 2 ♀ ♀, location: Cochin 2.xi.2000, Coll: Sunil Jose, K.; 2 ♂ ♂, location: Paravur, Ernakulam 15.xii.2000, Coll: Sudhikumar, A.V.

**Natural History:** Collected from leaves of *Mangifera indica* in the same habitats as that of *Oecophylla smaragdina* (Fabr.)

**Distribution:** INDIA: Ernakulam (Kerala State), Pune (Maharashtra); Burma (=Myanmar); Malaysia; Holland; Africa.

**Remarks:** According to Tikader, an eye-like spot is present on the posterolateral end of the abdomen in male, whereas this is absent in our specimens. Similarly, in the palp the embolus is coiled two and half times, whereas it was only

one and half times according to Tikader. The black irregular spot present on the anterolateral end of the abdomen in both sexes in our specimen is also absent in Tikader's description. Since the specimens are similar to Tikader's specimen in all other characters, we believe this difference may be a geographical variation or due to an omission in description.

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## REFERENCE

MATHEW, A.P. (1954): Observations of habits of two spider mimics of the Red Ant *Oecophylla smaragdina* (Fabr.). *J. Bombay nat. Hist. Soc.* 52: 249-263.

41. RARE SIGHTING OF OGRE-FACED SPIDER *DINOPIS GOALPARAENSIS*, ARANEAE: DINOPIDAE, IN THE BANANA AGRO-ECOSYSTEM OF VADODARA, GUJARAT

(With two text-figures)

*Dinopis* is commonly known as the ogre-faced spider. Review of literature shows that this spider is poorly known from India. There is a single report of the occurrence of *Dinopis goalparaensis* by Tikader and Malhotra (1978) from Jamduar, District Goalpara, Assam. This note records the occurrence of *Dinopis goalparaensis* from Gujarat for the first time.

To study spider diversity in a banana agro-ecosystem an extensive survey was carried out in different banana fields situated in a 20 km radius of Vadodara city. Spiders were hand picked

and preserved in 70% alcohol. The ogre-faced spider, attached to dry leaves of a banana plant, was collected from its web. These spiders have a flattened carapace, elongated abdomen and long slender legs. Because of these characters this spider superficially resembles the juvenile of *Eucta* sp. (Family: Tetragnathidae), however, it is easily differentiated from *Eucta* sp. by the following characters:

1. Posterior median eyes larger than the rest, black in colour, anterior median eyes smallest and anterior laterals present on